Growing tuberous sundews

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The tuber forming sundews (*Drosera* spp.) are the most diverse group in the genus. They are loosely divided into four groups based on habit. These are climbing, erect, fan-leafed, and rosetted. The climbing species include giants like *D. erythrogyne* and *D. pallida* that climb up to 3 m high, gluing their leaves to surrounding objects for support. The erect *D. gigantea* is truly spectacular reaching 60 cm tall with spreading branches festooned with sticky trapping leaves. The fan-leafed *D. rupicola* (Fig. 1) comes in lime green through various shades of orange, bronze through to deep red. In the rosette group, species like *D. erythrorhiza* subsp. *collina* (Fig. 2) and *D. bulbosa* subsp. *major* form huge rosettes exceeding 10 cm in diameter and are strong enough to bring down a dragon fly. The flowers of this group are equally as diverse in color (Fig. 3) many of which are sweetly scented. These characters have deservedly made the group desirable to collectors around the world, however many struggle to grow them well or maintain them long term. Cultivation techniques differ, but generally growers opt for growing them in water trays in glasshouses. They dry plants out in summer and await new growth in autumn before rehydrating. I do things a little differently so thought I'd share some of my experiences with the aim of assisting others to enjoy this incredible group.

Figure 1. *Drosera stolonifera* subsp. *rupicola* Emu Rocks.

Figure 2. *Drosera erythrorhiza* subsp. *collina* John Forest National Park Western Australia.

I have the luxury of living in the cool climate of the Blue Mountains in Australia. Here, winters are cool with daytime temperatures rarely exceeding 20°C and nights rarely below -5°C. Summer temperatures are fairly mild with temperatures between 15°C and 35°C. These temperatures are a little cooler than many species experience in the wild. In the wild, tuberous sundews receive their rainfall (generally less than 800 mm) in the cooler months and almost no rain in the

Figure 3. *Drosera stricticaulis* from South Australia.

summer. At my place in the Blue Mountains, annual rainfall is 1200 mm with the wetter period being the summer months. You would expect problems with cultivating tuberous plants in these conditions, but this is not the case if you follow a few simple rules.

Pot size is important for these plants to thrive long term (Fig. 4). Small pots dry out too quickly and temperatures in the soil fluctuate rapidly. For these reasons, I use 200 mm pots for all species. For the majority, pots are placed on open benches outdoors. This allows good drainage. A few species do like to be wet in winter and these are placed in water trays. These include *D. gigantea*, *D. fimbriata*, and *D. intricata*.

I have experimented with more than a dozen different soil mixes but have settled on just two. For the majority of species, a mix of 50% 8/16 screened silica sand to 50% sphagnum peat moss. The correct sand is important for long term good growth, silica sand is the only sand I will use as it is generally very clean so impurities won't build up in your compost, and also it has rounded edges and therefore does not lock together like sharp edged sand. Sharp edged sands, like river sand, will work for a few seasons but eventually the grains interlock and compact. The tuber then has trouble breaking through the compost and eventually starts to go backwards. The sand used in pool filters is generally silica sand of the grade that is suitable for tuberous sundews. If you live in the U.S. or Europe and find sand hard to come by, speak to your local pool supplier. The second mix I use uses the same sand and peat, but with more sand, up to 80%. This is used for the species that occur in deep sand in the wild like *D. zonaria*, *D. zigzagia*, and *D. bicolor*.

Watering is generally done by nature although I do hand water twice per week between April and October (remember this is southern hemisphere) if it doesn't rain. In a free draining mix, plants can be watered excessively with no ill effects, even through the dormancy period!

Every five or so years it is worth repotting your tuberous sundews for three reasons. First, over time the tubers can work their way down to the bottom of the pot, so this is a good time to reposi-

Figure 4. *Drosera erythrorhiza* subsp. *squamosa* grow well in a large pot.

Figure 5. *Drosera erythrorhiza* subsp. *erythrorhiza* tubers from a single pot that had not been repotted for almost 10 years.

tion them. Second, many species will asexually reproduce daughter tubers and these can be collected and used to trade or make another pot (Fig. 5). Finally, some species have a habit of spreading seed through other pots (*D. peltata*, *D. auriculata*, and *D. hookeri* being notorious) and over time these germinate and form plants that will contaminate even the best managed collection, so it pays to sort through the compost and remove these invaders.

Tuberous sundews enjoy high light levels. My plants receive direct sunlight for most of the day but are protected from afternoon sun so as to avoid over heating of the media.

If you live in a region where temperatures are comparable to those mentioned above, I suggest you give tuberous sundews a go. Start with an easy species like *D. auriculata*, *D. peltata*, *D. hookeri*, *D. macrantha*, or *D. whittakeri*. Using the above growing method you will be rewarded with a beautiful display year after year.